

# WILDERNESS EVALUATION

## Thorp Mountain - 617044

20,783 acres

### OVERVIEW

#### History

This area was analyzed under the Alpine Lakes Planning Process. The area was identified as an inventoried roadless area in the 1990 Wenatchee National Forest Land and Resource Management Plan.

The 2006 inventory removed approximately 7,434 acres from previous inventory due to nonconforming uses such as road construction and logging, and private land; 1,258 acres were added to the previous inventory as they met the criteria for a potential wilderness area (PWA) as described in Forest Service Handbook (FSH) 1909.12, Chapter 70. Table 1 depicts the 1990 Wenatchee National Forest Land and Resource Management Plan direction for the 2006 potential wilderness area.

**Table 1--Management area percentages (rounded)**

Wenatchee National Forest					
FS_PEN	GF	PVT	RE2A	ST1	ST2
7%	29%	4%	36%	13%	11%

#### Location and Access

This PWA is within Kittitas County and lies within the Cle Elum Ranger District, between Lake Cle Elum and Lake Kachess. It lies adjacent to the Alpine Lakes Wilderness. Access is primarily via the Cle Elum Valley, French Cabin Creek, and Cooper Pass road systems.

#### Geography and Topography

This area is characterized by steep slopes and hard bedrock materials. Glaciation has played a major role in shaping the surrounding areas as well as part of the potential wilderness area itself. Elevations range from 2,400 to almost 6,000 feet.

#### Current Uses

The current use is for dispersed recreation on National Forest System lands and commercial timber harvest on private lands.

Trail management in this PWA is difficult due to the checkerboard ownership.

## **Appearance and Surroundings**

The potential wilderness area has moderate visual variety of land form, vegetation, rock form, and water form (lakes and streams). The ridgetops have moderate to high visual variety. The area is steep, with tree covered mid and lower slopes, and open grassy or rocky upper slopes, meadow systems, lakes, and craggy peaks. Vegetation is sparse on the upper slopes.

The area is primarily viewed as foreground and middle ground from Lake Kachess and Lake Cle Elum. The ridge tops and higher peaks are also viewed as background from trails on the upper slopes and ridges.

The Thorp Mountain area is bounded by the Kachess River Valley and Lake Kachess on the west. It is bounded by the Cooper River Valley on the north, and by the Cle Elum River Valley and Lake Cle Elum on the east. The southern tip of this area extends to Domerie Flats, and to within 1 mile of Interstate 90.

## **Key Attractions**

Major attractions within the area are Silver Creek basin and meadows, Thorp Mountain and Thorp Mountain Lookout, Thorp Lake, Red Mountain, Little Joe Lake, French Cabin Basin, and Domerie Peak.

## **CAPABILITY FOR WILDERNESS**

### **Level of Natural and Undeveloped Environment**

This area has been managed under a fire suppression strategy; however, because this area is within a high intensity fire regime, it is probably only slightly altered from pre-European times or its natural cycle. The functioning of the natural environment has been disrupted throughout much of the surrounding area from numerous roads and timber harvest units, which are also visible to visitors using this area.

There are no surveyed noxious weed species within this PWA. Non-native brook trout have been introduced to Silver Creek.

The Thorp PWA is impaired by light pollution from development around Lake Cle Elum, the town of Cle Elum, passing traffic on I-90, and ski area operations and development in the Snoqualmie Pass area. The central and eastern portions of the PWA (55 percent of the PWA) rate a Class 3 on the Bortle Scale, whereas the western and southern portions (45 percent of the PWA) rate a Class 4. A Class 3 Rural Sky has some indication of light pollution on the horizon. Clouds may appear faintly illuminated in the brightest parts of the sky near the horizon, but are dark overhead. The Milky Way still appears complex. Light domes from population centers may appear on the horizon (10-15 degrees above horizon). Visual observing is still relatively unimpaired. Time lapse photography could be impaired by light pollution. A Class 4 Rural/Suburban Transition Sky exhibits fairly obvious light-pollution domes over population centers in several directions. The Milky Way well above the horizon is still impressive but lacks all but the most obvious structure. Clouds in the direction of light pollution sources are illuminated but only slightly so, and are still dark overhead. Modest to serious impact to deep sky observing and imaging occurs.

Water quality data is not available for most of the PWA, however due to the relatively low level of disturbance water quality is assumed to be high. A portion of Cle Elum Lake is classified by the Washington State Department of Ecology as Category 1, which means the segment met tested standards. A portion of Thorp Creek is classified by the Washington State Department of Ecology as Category 2, waters of concern, which means there is some evidence of a water quality problem, but it does not require a water quality cleanup plan.

### **Level of Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation**

Opportunities for solitude and remoteness exist in much of the area, though noise from the outside (Lake Cle Elum, I-90, Lake Kachess) intrudes much of the time.

Some areas offer trailless opportunities for cross-country hiking challenges. The winter season offers opportunities for snow camping, snowshoeing, skiing, and other winter survival pursuits.

The PWA is most capable of providing challenging trail-related recreation including mountain biking, hiking, horseback riding, snowmobiling, backcountry skiing, and, to a limited extent, motorcycling.

### **Special Features**

This PWA is located in critical habitat for northern spotted owl (CHU WA13), and the North Cascades Grizzly Bear Recovery Zone (Cle Elum Bear Management Unit). It is also located in the Snoqualmie Pass Adaptive Management Area, where there is emphasis on maintaining and improving the connectivity of (dense) late-successional forest habitats across the I-90 corridor. Recent land acquisitions greatly enhanced the potential to manage this particular potential wilderness area for long-term habitat connectivity, consistent with Adaptive Management Area (AMA) objectives. Opportunity exists to further enhance late-successional habitat effectiveness and connectivity through additional road closures and/or obliterations in and adjacent to the potential wilderness area.

The Thorp Mountain PWA includes one sensitive plant species; creamy lady's tresses (*Spiranthes porrifolia*).

### **Manageability of Boundaries**

The west boundary is parallel to Kachess Lake and Kachess River; the north and east boundaries meander somewhere parallel to the Cooper and Cle Elum Rivers with the south ends of the west and east lines pinching together on Easton Ridge. Most of the boundaries do not follow clearly defined physical features. In some areas the boundaries are comprised of section lines and harvest unit boundaries. These boundaries do not do a good job of shielding the area from outside influences. Portions of this PWA receive appreciable public use. These are typically the ridge tops, from which there are ample views of clear-cuts, roads, and other developments outside the wilderness. A notable exception is the Silver Creek drainage which is highly pristine in all regards, and from which the outside developments are not visible.

## **AVAILABILITY FOR WILDERNESS**

### **Recreation**

This area is bisected by 11 non-motorized trails that are open to hikers, horse, and mountain bikes, and one single-track motorized trail. Kachess Ridge trail--especially the southern half--is quite popular with hikers, horsemen, and mountain bikes. There is a certain amount of backcountry snowmobiling that occurs around the fringes of the area. One trail, Domerie Peak, is open to motorcycles, though it is very difficult and so receives little use.

If the area was designated in the wilderness system the motorized and mechanized recreation that is popular in this area would be unavailable.

For the central Puget Sound region, Chelan and Kittitas Counties are the first stop on the dry eastside. The Thorp Mountain area is most likely to attract mountain bikers as a non-local user group due to promotion of the area within the mountain biking community. Tourism brochures and chamber of commerce websites have not specifically promoted this PWA. Thorp Mountain provides the scenic backdrop to the I-90 corridor and Lake Cle Elum.

An extensive resort community is being developed in the Cle Elum area with a high likelihood that the residents and guests will recreate on the nearby national forest. If linked to the State of Washington population as a whole (IAC SCORP Report, 2002), recreation preferences would likely favor hiking and nature-based activities (53 percent and 43 percent of the population respectively). Currently, 21 percent of the population bicycles (primarily road biking), nine percent of the population recreates with off-road vehicles, and 3 percent participates in equestrian activities (lumping use of developed equestrian centers and backcountry). The National Study on Recreation and the Environment (Cordell, 2004) offers a similar data set for Washington State residents age 16 and older. Of the types of use that could occur in PWAs, 47 percent of the population participates in day hiking, 45 percent visits wilderness or primitive areas, 28 percent engage in mountain biking, 22 percent go backpacking, 21 percent drive off-road, 7 percent horseback ride on trails, and 6 percent go snowmobiling.

All of these activities are on a growth trend and recreational supply is limited both on and off National Forest System lands. Providing a variety of settings for recreational experiences will continue to compliment the tourism marketing strategies of these communities. If this area is designated as wilderness, it is anticipated that visitation is likely to increase due to probable increase in media publicity for certain areas of the PWA.

**Table 2--Miles of Recreation Trails**

<b>Motorized Trails</b>	<b>Non-motorized Trails</b>	<b>Snowmobile Trails</b>
8	25	0

## Wildlife

The PWA provides dense late-successional forest habitat used by the northern spotted owl (threatened), American marten, and potentially used by marbled murrelet (threatened) and Pacific fisher (R6 sensitive). Some recently acquired private lands support large regenerating clearcuts and huckleberry fields that provide early-successional habitats used by elk, black-tailed deer, black bear, and potentially grizzly bear. There is also high-elevation bedrock, cliffs, and talus here that may be used by wolverine--an R6 sensitive species that was documented in the adjacent watershed in the early 1900s. Larch mountain salamander (survey and manage) has also been documented near talus within the potential wilderness area. *Cryptomastix devia* (a survey and manage mollusk) is likely to occur here as well.

The Thorp PWA is particularly well-situated to effect year-round management of habitat for the Kachess Ridge mountain goat herd, which anecdotal reports indicate may be declining. This area encompasses summer and winter range areas, kidding areas, and ridgelines that function as migration and travel corridors. Recent road building and harvest on private land adjacent to the area has decreased security habitat and increased the potential for disturbance to this goat herd.

Each PWA provides varying levels of habitat for focal wildlife species. To help evaluate the habitat this area provides, the following information was provided: the focal species emphasized in the area, the amount of habitat for each focal species, the priority ranking for the habitat (based on conservation assessments and recovery plans), and the proportion of the total habitat available on the Forest that is within the PWA.

**Table 3--Availability of habitat for federally listed Threatened and Endangered wildlife species and R6 Focal Species**

Wildlife Species	Acres Habitat	Habitat Priority Ranking (1=high, 2=mod, 3=low)	%Total Forest Habitat In Evaluation Area
Grizzly bear	17,200	2	2
Canada lynx	8	3	<1
Wolverine	16,821	2	1
American marten	5,793	2	2

A key issue relative to the sustainability of wildlife habitats is the identification of the amount of dry forest that is in a late-successional habitat area (LSHA). LSHAs that occur in dry forests can be at high risk of high severity wildfire, and insects and disease that reduce the sustainability of the late-successional habitats. Active management such as prescribed fire and thinning may be needed to restore these habitats and enhance their sustainability.

**Table 4--Acres of dry forest habitats that are present within the evaluation area and also within a Late Successional Habitat Area**

Late-successional Habitat Area	Acres of Dry Forest
Snoqualmie Pass AMA	Approx. 620

## Water and Fish

There are four subwatersheds (6<sup>th</sup> HUC) covering 20,790 acres included in the proposed Thorp PWA:

- Upper Cle Elum River , 1,988 acres, or two percent acres in the 97,957 acre subwatershed
- Lower Cle Elum, 9,956 acres, or 23 percent of the 44,230 acre subwatershed
- Kachess River, 4,796 acres, or 12 percent of the 41,094 acre subwatershed
- Big Creek, 4,040 acres, or five percent of the 82,033 acre subwatershed.

The U.S. Forest Service manages the following percentage in each subwatershed: upper Cle Elum (99 percent); lower Cle Elum (51); Kachess River (75 percent); and Big Creek (31 percent).

Vegetation manipulation, dam construction, and existing road effects have substantially reduced the ability of the lower Cle Elum River to function similarly to unmodified watersheds. Subwatershed vegetation conditions were altered from expected natural forest conditions; analyzed road effects were substantial. Vegetation condition and road effects considered cumulatively were rated poor. Stream reach data has not been collected in sufficient quantity for analyses; therefore, watershed condition and response have not been evaluated.

Stream reach conditions in the upper Cle Elum subwatershed that respond to natural and human caused disturbances were evaluated as fair. This rating was assigned because collected stream data values were lower than expected values measured in high functioning stream habitat elsewhere on the Okanogan-Wenatchee National Forest. Subwatershed vegetation conditions were somewhat altered from expected natural forest conditions; analyzed road effects were moderate. Vegetation condition and road effects considered cumulatively were rated fair. When vegetation condition and road effects were combined with measured stream responses to summarize overall subwatershed condition, this subwatershed was rated fair.

The mainstem lower Cle Elum River below the impoundment was designated as critical habitat for steelhead by the National Marine Fisheries Service in January 2006. There are two notable tributary streams that support trout: Domerie Creek and Silver Creek. Domerie Creek supports native westslope cutthroat and non-native brook trout. The hanging valley portion of Silver Creek hosts an abundant population of westslope cutthroat trout.

The subwatersheds in this PWA collect runoff that helps fill Kachess and Cle Elum Reservoirs. Both reservoirs influence downstream water quality, water quantity, and associated fish production in the Yakima River.

The Federal Energy Regulatory Commission has submitted applications to study hydropower potential on three streams within the PWA: Silver Creek, French Cabin Creek, and Thorp Creek. The Thorp Mountain PWA has two water source protection areas that provide water to community water systems: the City of Roslyn, 443 acres; and the Cle Elum Water Department, 4,604 acres.

## Range

A portion of the Cooper-French Sheep and Goat allotment is within this area. This allotment is currently vacant.

**Table 5--Grazing suitability and allotments**

Percent area suitable for cattle grazing	Percent suitable area currently in cattle allotments	Percent area suitable for sheep grazing	Percent area suitable currently in sheep allotments
1	0	4	0

## Vegetation and Ecology

The PWA primarily has a dense conifer cover with Douglas-fir, Pacific silver fir, noble fir, and western hemlock the most common species. Lodgepole pine and western white pine occupy rocky areas such as Red Mountain.

### *Timber Harvest Suitability*

The underlying criteria for determining timber harvest suitability are found in the Forest and Rangeland Renewable Resources Planning Act of 1974, 36CFR219.12, and Forest Service Handbook 1909.12, Chapter 60.

For the Colville and Okanogan-Wenatchee National Forests, the general criteria for timber suitability that will be used for timber harvest suitability are:

- Is it forest land (10 percent crown cover minimum, productivity >20 ft<sup>3</sup>/ac/yr).
- The area has not been withdrawn from timber harvest or production.
- Soil, slope, or other watershed conditions will not be irreversibly damaged (based on soil attributes for erosion, instability, or compaction potential, slopes >65 percent, and certain land types)
- Reforestation can be assured within five years (lack of shallow soils, low frost heave potential, low surface rock, plant community type, certain land types, and elevation <5,500 feet)
- Economic and technologic viability (<0.5 miles from existing transportation system, species value or condition, volume availability, logging systems)

In consideration of all the criteria for determining timber harvest or timber production suitability and not just the fact that harvestable species can grow at a specific location, it appears this PWA does not have conditions that pass all the criteria. The main criterion for failure is that unacceptable resource impacts would likely occur due to road construction activities. This does not preclude helicopter operations that could fly material over sensitive areas to adjacent road systems. However, in most if not all cases helicopter logging and the associated expenses (such as manual slash treatments) would not be an economically viable option.

**Table 6--Stand Data Percentages**

Suitable for Timber Harvest	Forest Groups		WUI	
0%	Parkland	4%	Total WUI	32%
	Cold Dry	0%	WUI in Dry and Mesic Forest	34%
	Cold Moist	76%		
	Mesic	11%		
	Dry	3%		
	Non-forest	5%		

***Fire***

Annual fire occurrence is low to moderate, generally ignited by lightning. Fuel loadings are light to heavy but broken by openings such as bare ridge tops.

***Insects and Disease***

The Wilderness Act of 1964 allows for the control of insects and disease, but taking such actions in wilderness is rare. Forest Service wilderness policy (Forest Service Manual 2324.11) directs the agency “to allow indigenous insect and plant diseases to play, as nearly as possible their natural ecological role”. Policy also directs the agency to “protect the scientific value of observing the effect of insects and disease on ecosystems and identifying genetically resistant plant species”, and finally, “to control insect and plant disease epidemics that threaten adjacent lands or resources.”

An aerial survey of this PWA was completed in 2007. No insect and disease issues were identified.

***Threatened, Endangered, and Sensitive Plant Species***

The Thorp Mountain PWA includes one sensitive plant species; creamy lady’s tresses (*Spiranthes porrifolia*).

***Noxious Weeds***

There are no surveyed noxious weed species within this PWA.

***Minerals and Soils***

This area is primarily underlain by pre-Tertiary and Tertiary metamorphic and volcanic rocks; however, a small portion of the area near South Peak is underlain by Tertiary-aged sedimentary rocks. The area has not been investigated in detail by the U.S. Geological Survey (U.S.G.S.) or the U.S. Bureau of Mines (U.S.B.M.), but available references indicate the area has reported occurrences of copper, nickel, molybdenum, gold, and silver. Based on studies conducted on adjacent lands, the subject area can be inferred to have a moderate mineral resource potential.

According to data provided by the Northwest Mining Association (NWMA), Sections 29 and 30, T. 22 N., R.14 E. may contain a porphyry copper mineral resource which the



NWMA feels could have a “major” potential for future development. The mineral occurrence has not been explored by drilling so it remains speculative that a mineral resource might actually exist, let alone be economically viable now or in the future. While the area has been covered by numerous mining claims in the past, there are presently no mining claims located within these sections. In the absence of a national emergency or a substantial change in the present economic conditions it is unlikely that the deposit would be explored in the next 10 to 20 years to a degree necessary to be brought into production.

The entire area is classified prospectively valuable for coal resources by the U.S.G.S., but the area is not known to contain a deposit of commercial value. The area has not been classified prospectively valuable for oil and gas, nor has it been classified prospectively valuable for any other leasable commodity. Bureau of Land Management mining claim records indicate that 145 lode mining claims and 3 placer mining claims have been located within the area, mainly around the Red Mountain mineralized zone. Two lode claims remain active while the remainder has been abandoned. Surface disturbing activities have been proposed on the two active claims which cover a small, historic mine site. Both claims are within Section 18, T. 22 N., R. 14 E.

It is assumed that most of the abandoned claims were located for the copper and gold resource potential of the area. However, the degree to which the abandoned claims have been explored is not known.

About 60 percent of the soils have formed in very hard sandstone and granitic parent materials. Glacial till soils account for about 30 percent of the area, and about 20 percent of the area soils have formed in schist materials. There are also a few areas of pyroclastic soils. Most of these soils are non-sticky and non-plastic and generally have a high bearing strength. They are all moderately productive and about 70 percent of the area is well suited to timber production. Most of the forested soils are moderately deep and well drained.

## **Cultural and Heritage Resources**

Thorp Mountain lies between two areas of concentrated prehistoric use (Salmon La Sac to the east and Lake Kachess to the west), and probably experienced at least some transient use as a consequence. Historic uses include trapping. Historic sites are the Red Mountain Lookout (1932-abandoned 1948), the existing Thorp Mountain Lookout, and the faint remains of one mining-related cabin. The entire locality was included within sheep allotments from the late 1800s until the 1920s, and some remnants of this use may still exist. Unless a site has been determined to be ineligible for the National Register, it is managed as a significant site until such a determination is made. Cultural sites are protected by law; however, a wilderness designation or a roadless designation would afford additional protection to cultural sites from ground disturbing activities.

## **Land Uses and Special Uses**

There are no special use permits in effect in this area.

The Thorp Potential Wilderness Area falls entirely within lands ceded to the U.S. Government under the Yakama Treaty. Indian tribes hold rights reserved under treaty and recognized in statutes, executive orders, and policies. Generally, these included rights to fish at usual and accustomed grounds and stations, the right to hunt and gather on open and

unclaimed lands, the right to erect temporary houses to cure fish, and the right to pasture horses and cattle on open and unclaimed lands.

### **Private Lands**

There are no private lands within the potential wilderness area. The southern boundary of the area abuts private land outside the national forest boundary.

## ***NEED FOR WILDERNESS***

### **Location and size of other wildernesses in the general vicinity, and distance from proposed area and population centers:**

This area is located within a few miles of the Alpine Lakes (362,789 acres), Norse Peak (52,180 acres), William O. Douglas (168,232 acres), and Goat Rocks (107,018 acres) Wildernesses. This area is within one and a half hour's drive of the greater Seattle area.

In ranking this PWA for its potential to provide a high quality wilderness recreation setting it ranked as moderate. Portions of the area are very accessible off of Interstate 90. The PWA provides high quality scenic destinations that would attract wilderness users. In addition, interconnected trail systems would facilitate both day trips and overnight use. However, this PWA is not as high a priority for providing a wilderness recreation setting as those PWAs that would provide a altogether new setting to the National Wilderness Preservation System, or are contiguous with existing wilderness.

### **Present visitor pressure on other wildernesses, trends, and changing patterns of use:**

Use patterns remain flat overall in nearby wildernesses. Day hiking is up slightly in the past few years, while overnight use, both backpacking and horse packing are down slightly. Hunting has declined substantially in the past decade.

### **Extent to which non-wilderness lands provide opportunities for unconfined outdoor recreation experiences:**

This area, as with many non-wilderness areas in this vicinity, provides high quality opportunities for all varieties of unconfined recreation. A variety of trails catering to all types of users exist. Other nearby PWAs include Alpine Lakes Adjacent, Teanaway, and Manastash.

### **The need to provide a sanctuary for those biotic species that have demonstrated an inability to survive in less than primitive surroundings or the need for a protected area for other unique scientific value or phenomena:**

***Wildlife***

Wilderness designation would provide sanctuary for a number of species including gray wolves, grizzly bear, lynx, wolverines, American marten, Pacific fisher, and the marbled murrelet. The northern spotted owl also has habitat in this area, a portion of which is in dry forest, where it may be more important to allow for mechanical treatment of vegetation in order to provide for long-term habitat sustainability. The wildlife sustainability index is 19.9 (a moderate relative ranking) and the habitat connectivity index is 15.2 (also moderate relative ranking).

***Fish***

Several native species in the interior Columbia River Basin have demonstrated an inability to survive in less than primitive surroundings, especially the bull trout. In addition to habitat changes on National Forest System lands, other factors off forest such as hydropower generation, hatchery programs, harvest, and changing ocean conditions further challenge the persistence of some far-ranging native species. Broad-scale assessments have demonstrated a positive correlation between unroaded areas and persisting native fish stocks. Often, assessments like these don't differentiate between wilderness and roadless areas; rather they combine the two into an "unroaded" category. These assessments show current strongholds (most secure and robust populations) are dependant on wilderness and roadless areas. Some of the more resilient native fish populations in the Interior Columbia Basin are located in unroaded areas on National Forest System lands.

For the Okanogan-Wenatchee National Forest PWAs were assigned an aquatic ranking based on federally listed and sensitive fish species that are sensitive to human disturbances. A high ranking was assigned when listed fish species occur in the PWA or when ecological process including high quality water help sustain listed fish species downstream of the PWA. All other PWAs are ranked low. This PWA is assigned a high ranking based on these factors.

***Rare Plant Species***

An analysis was completed to prioritize which PWAs would contribute the most to providing refugia for those plant species on the species of interest/species of concern (SOI/SOC) list. The analysis ranked three factors. The first factor, the total number of sites occurring within the PWA, ranked as low for this PWA. The second factor, which also ranked as low for this PWA, examined the degree of rarity of any SOI/SOC species present, and also recognized the importance of individual PWAs in supporting a high incidence of populations relative to Washington state as a whole.

PWAs are generally unsurveyed for rare plants due to a relative lack of projects occurring in these areas. Thus an additional factor examined the potential for the PWA to support SOI/SOC species. Based on databases, first the SOI/SOC plant species were identified that are present within a five-mile radius of the PWA, but are not known to occur within the PWA. Then the PWA was analyzed to see if the potential habitat for these species occurs within the PWA. Based on this analysis, this PWA ranks as high.

Finally, a composite score was assigned to each PWA based on combining each of the rankings described above. This PWA ranks overall as moderate priority for preserving rare plant refugia with a wilderness designation.

**Ability to provide for preservation of identifiable landform types and ecosystems:**

This area represents the East Cascades Ecoregion using Bailey's Ecoregional Classification System. This ecoregion type is well represented in existing wilderness lands in the Cascade Range.

An analysis compared vegetative cover types that are under-represented in wilderness on the National Forest System in Region 6 with those same cover types present in the PWA. Large-scale cover types were available through existing data layers and represent approximately 6 percent of the vegetative cover of this PWA (approximately 1,320 acres). These types include forb lands, alpine meadows, non-alpine meadows, and ponderosa pine. Taken as a whole, the contribution of underrepresented vegetation types ranks as low for the portion of this area with underrepresented cover types, and also as moderate for the number of acres that are represented within this PWA relative to the other PWAs in the planning area.

Some under-represented cover types fill microhabitats such as riparian areas or perched water tables. Such finer scale cover types represented in this PWA include sparse amounts of cottonwood, red alder, and quaking aspen.

In particular, the non-alpine meadow cover type, which comprises approximately 1,040 acres in this PWA, would make a significant contribution within the eastern Washington planning area.